

WHAT IS CLAIMED IS:

1. An image display device comprising:

an image display panel module;

a middle frame which places the image display panel module thereon; and

an upper frame which is engaged with a side face of the middle frame by way of an engaging portion in a state that the upper frame covers a periphery of the image display panel module, wherein

the engaging portion includes projecting portions on a side face of the middle frame, the projecting portions being smoothly raised in the direction opposite to the image display panel module and forming a sharp stepped portion which follows a raised portion, and pawl portions which are formed on portions of the upper frame which face the projecting portions, the pawl portions being bent along side faces of the stepped portions of the projecting portions and, thereafter, being bent such that the pawl portions extend while having substantially arcuate curved faces which have one ends thereof in the vicinity of bent portions.

2. An image display device according to claim 1, wherein a curvature of the arcuate curved faces of the pawl portions of the upper frame which extends from the bent portions is set larger than a curvature of the projecting portions of the middle frame at the raised portions.

3. An image display device according to claim 1 or 2, wherein the pawl portions of the upper frame are formed by press forming.

4. An image display device comprising:

an image display panel module;

a middle frame which places the image display panel module thereon;

a lower frame which is fixed to the middle frame and incorporates a backlight therein; and

an upper frame which is engaged with a side face of the middle frame by way of an engaging portion in a state that the upper frame covers a periphery of the image display panel module, wherein

the engaging portion includes projecting portions on a side face of the middle frame, the projecting portions being smoothly raised in the direction opposite to the image display panel module and forming a sharp stepped portion which follows a raised portion, and pawl portions which are formed on portions of the upper frame which face the projecting portions, the pawl portions being bent along side faces of the stepped portions of the projecting portions and, thereafter, being bent such that the pawl portions extend while having substantially arcuate curved faces which have one ends thereof in the vicinity of bent portions, and

a gap is defined between a back face of the middle frame on which the projecting portions are formed and the lower frame.

5. An image display device comprising:

an image display panel; and

a lower frame which is arranged on a back face of the image display panel in a state that the lower frame incorporates lamps therein, wherein

the lower frame has at least respective sides thereof parallel to the longitudinal direction of the lamps bent toward the image display panel side at an angle of approximately 90° ,

cut-and-raised portions which are juxtaposed substantially parallel to and in the vicinity of respective sides of the lower frame are formed, and

a reflector which is placed on the lower frame such that the reflector also covers the respective cut-and-raised portions is bent at respective sides thereof supported by the cut-and-raised portions at an angle equal or less than the angle of the bent portions of the lower frame.

6. An image display device according to claim 5, wherein holes which allow communication of air therethrough are formed in at least portions of respective sides of the reflector which are supported by the cut-and-raised portions and are not brought into contact with the cut-and-raised portions.

7. An image display device comprising:

an image display panel; and

a frame which places the image display panel thereon, wherein

a projecting portion is formed on the frame and over a whole periphery of the image display panel such that the projecting portion surrounds the image display panel: and

the distance to the projecting portion in respective corners of the image display panel is set larger than the distance to the projecting portion at portions other than the respective corner portions under an ordinary temperature.

8. An image display device comprising:

an image display panel module which mounts a plurality of semiconductor devices formed by a tape carrier method thereon; and

a frame on which the image display panel module is placed, wherein

recessed portions are formed in the frame below the semiconductor devices which are arranged at least at one end side out of the plurality of juxtaposed semiconductor devices which are mounted on one side of the image display panel module.